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09/581,459	07/27/2000	STEPHAN SCHMITZ	10191/1452	7359
26646	7590	12/15/2006	EXAMINER	
KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			LIPMAN, JACOB	
			ART UNIT	PAPER NUMBER
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/581,459  
Filing Date: July 27, 2000  
Appellant(s): SCHMITZ ET AL.

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Gerald A. Messina  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 14 September 2006 appealing from the Office action mailed 14 April 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,745,576	Abraham et al.	4-1998
4,797,672	Kousa	1-1989
6,070,243	See et al.	5-2000

**Schneier, Applied Cryptography, 1996, John Wiley and Sons Inc., Second edition, pages 47-51, 179, and 180**

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 11, and 14-18 are rejected under 35 U.S.C. 103(a) as being anticipated by Abraham et al., US Patent number 5,745,576 in view of Kousa, US Patent number 4,797,672.

With regard to claim 10, Abraham discloses a base station (controller) including a computer (column 12 lines 13-47) that transmits a prompt (column 9 lines 56-61, column 10 lines 56-59), and a remote control device (terminal, column 1 lines 13-15) which stores the prompt (column 9 lines 21-24, column 10 lines 60-62), and transmits a code word as a reply (column 9 lines 24-30, column 10 lines 63-64) that is partially a function of the prompt (column 9 lines 24-26, column 10 lines 64-65), the base station receives the reply and compares it with the required reply (column 10 lines 66-67), and grants access accordingly (column 11 lines 1-3). Abraham does not disclose that an initial stored prompt from a successful prompt/reply cycle is used to encrypt the authorization information. Kousa discloses that often an encrypted exchange will be preceded by a key exchange to create a session key to use in further authentications (column 2 lines 3-10). It is further added that the examiner takes official notice that key exchange to begin a session is well known in the art. It would have been obvious for

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one of ordinary skill in the art to use key exchange preceding Abraham to prevent eavesdropping. With regard to the base computer erasing the session key after a number of failed attempts, Abraham does not mention abandoning the process after a specific number of failed attempts. The examiner takes official notice that it is well known in the art to check failed attempts to connect, and to abandon an access process after a predetermined number of failures. It would have been obvious for one of ordinary skill in the art to use this check in Abraham's system to avoid eternal loops, and to increase security against hacking. Support for this can be seen in See et al., USPN 6,070,243. See discloses terminating a session with a user after a predetermined number of failed login attempts (column 11 lines 15-38). Further Schneier discloses that session keys are erased when a session is ended (page 180, paragraph beginning "some").

With regard to claim 11, Abraham discloses the response is a function of the terminal's serial number (column 9 lines 24-28).

With regard to claim 12, Abraham discloses the challenge is stored in the base system (column 9 lines 56-59).

With regard to claim 14, Abraham discloses the reply includes a transaction count (column 9 lines 24-26), which is tracked (column 10 lines 22-24).

With regard to claim 15, Abraham discloses the count is changed (column 31-35).

With regard to claim 16, Abraham discloses the counter code has been previously transmitted to the base station (column 9 lines 42-46).

With regard to claim 17, Abraham discloses the counter code is encrypted (column 9 lines 24-26).

With regard to claim 18, Abraham discloses the system of claim 10, as outlined above, but does not mention wireless communication or frequencies. The examiner takes official notice that it is well known in the art to have different wireless device working on different frequencies. It would have been obvious for one of ordinary skill in the art to use Abraham's system in a wireless environment with different frequencies to avoid interference and allow mobility.

#### **(10) Response to Argument**

With regard to applicant's argument that, "the encrypted challenge message must be stored to be decrypted" is nothing more than a self-serving statement, the examiner disagrees. It is well known in the art, that a computer cannot take action on data without storing it somewhere first. Further, Abraham discloses storing an initial key and hashing it to get the next key, which is also stored (column 7 lines 10-20).

With regard to applicant's argument that Abraham does not teach a system for access authorization, the examiner points out that this has never been claimed. The claims state "A system for controlling an access authorization". Abraham authenticates a cryptographic terminal so that the terminal can be accessed, and it can access other data. This can be seen in column 6 line 27-column 7 line 9. Further, Fig 3 has a final step of the controller welcoming the terminal.

The applicant argues that there is no motivation to combine Abraham and Kousa. The examiner points out that Abraham discloses a system that includes an initial key

using a stored value (count value) to create an encryption key (column 4 lines 12-20). While the count value is from a former prompt reply/cycle, it is not necessarily from an initial prompt/reply cycle. While Abraham discloses information being sent a received, he does not disclose a specific wrapper to secure information from attacks and eavesdropping. Kousa discloses that often an encrypted exchange will be preceded by a key exchange to create a session key to use in further authentications (column 2 lines 3-10), and could thus prevent eavesdropping and other attacks that are very well known in the art (column 1 lines 52-58).

With regard to applicant's argument that the examiner has failed to show that it would be obvious to delete the initial prompt after a predetermined number of failed attempts, the examiner points again to See and Schneier. It is very well known in the art to allow only a predetermined number of access attempts before refusing further attempts, as shown in See. In the combination of Abraham and Kousa, it would not be practical to hold onto the negotiated initial key, without overloading memory with extra useless keys. That is why it would be obvious to one of ordinary skill in the art to apply the teaching of Schneier to delete a session key when the session is over.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Jacob Lipman

*Jacob*

Conferees:

*JL*

Gilberto Barron

*GB*

Matthew Smithers

*MS*

*Gilberto Barron Jr.*  
GILBERTO BARRON JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100